Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	2	Maximum Rainfall (mm/hr)	50.0
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	19.000	Minimum Backdrop Height (m)	0.200
Ratio-R	0.306	Preferred Cover Depth (m)	1.200
CV	0.750	Include Intermediate Ground	✓
Time of Entry (mins)	4.00	Enforce best practice design rules	✓

1 STANDARD Manhole Type

Max Width (mm)	Diameter (mm)	Max Width (mm)	Diameter (mm)
374	1200	749	1500
499	1350	900	1800

>900 Link+900 mm

Max Depth (m)	Diameter (mm)	Max Depth (m)	Diameter (mm)
1.500	1050	99.999	1350

1 STANDARD Link Type

Template	Freeform Carrier	Auto Increment (mm)	75
Shape	Circular	Follow Ground	x
Barrels	1		

Available Diameters (mm)

100 | 150

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Depth (m)	Invert Level (m)
RE	0.008	4.00	119.850	150	0.700	119.150
SW01	0.008	4.00	119.850	450	0.900	118.950
SW02	0.054	4.00	119.850	450	1.050	118.800
4	0.009	4.00	120.850	150	0.700	120.150
SW03			120.850	450	1.000	119.850
6	0.009	4.00	120.850	150	0.700	120.150
SW04	0.009	4.00	120.850	450	1.400	119.450
SW05	0.009	4.00	120.600	1200	2.075	118.525
SW06	0.022	4.00	116.200	1200	1.425	114.775
TANK	0.004	4.00	115.850	300	1.750	114.100
CHANNEL	0.122	4.00	115.800	300	1.300	114.500
SW07	0.015	4.00	115.850	450	1.000	114.850
SW08	0.031	4.00	115.850	1200	1.770	114.080
14	0.009	4.00	115.850	450	0.900	114.950
SW09	0.045	4.00	115.600	1200	1.605	113.995
SW10	0.015	4.00	115.050	1500	1.285	113.765
SEWER			114.600		1.050	113.550

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.000	RE	SW01	17.000	0.600	119.150	118.950	0.200	85.0	100	4.34	50.0
1.001	SW01	SW02	11.000	0.600	118.950	118.850	0.100	110.0	100	4.59	50.0
1.002	SW02	SW05	29.000	0.600	118.800	118.600	0.200	145.0	150	5.17	50.0
2.000	4	SW03	17.000	0.600	120.150	119.850	0.300	56.7	100	4.28	50.0
2.001	SW03	SW04	13.000	0.600	119.850	119.450	0.400	32.5	100	4.44	50.0
3.000	6	SW04	17.000	0.600	120.150	119.450	0.700	24.3	100	4.18	50.0
2.002	SW04	SW05	9.000	0.600	119.450	119.300	0.150	60.0	100	4.59	50.0
1.003	SW05	SW06	36.000	0.600	118.525	114.775	3.750	9.6	225	5.31	50.0
1.004	SW06	TANK	12.000	0.600	114.775	114.400	0.375	32.0	225	5.40	50.0
1.005	TANK	SW08	5.000	0.600	114.100	114.080	0.020	250.0	300	5.48	50.0
4.000	CHANNEL	SW08	9.000	0.600	114.500	114.440	0.060	150.0	225	4.14	50.0
5.000	SW07	SW08	21.000	0.600	114.850	114.550	0.300	70.0	100	4.38	50.0
1.006	SW08	SW09	21.000	0.600	114.080	113.995	0.085	247.1	300	5.83	50.0
6.000	14	SW09	34.000	0.600	114.950	114.195	0.755	45.0	100	4.49	50.0
1.007	SW09	SW10	57.000	0.600	113.995	113.765	0.230	247.8	300	6.79	50.0
1.008	SW10	SEWER	4.000	0.600	113.905	113.550	0.355	11.3	150	6.81	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)
1.000	0.835	6.6	1.1	0.600	0.800	0.008	0.0
1.001	0.732	5.8	2.2	0.800	0.900	0.016	0.0
1.002	0.832	14.7	9.5	0.900	1.850	0.070	0.0
2.000	1.025	8.1	1.2	0.600	0.900	0.009	0.0
2.001	1.358	10.7	1.2	0.900	1.300	0.009	0.0
3.000	1.573	12.4	1.2	0.600	1.300	0.009	0.0
2.002	0.996	7.8	3.7	1.300	1.200	0.027	0.0
1.003	4.248	168.9	14.4	1.850	1.200	0.106	0.0
1.004	2.321	92.3	17.3	1.200	1.225	0.128	0.0
1.005	0.990	70.0	17.9	1.450	1.470	0.132	0.0
4.000	1.065	42.3	16.5	1.075	1.185	0.122	0.0
5.000	0.921	7.2	2.0	0.900	1.200	0.015	0.0
1.006	0.996	70.4	40.7	1.470	1.305	0.300	0.0
6.000	1.152	9.0	1.2	0.800	1.305	0.009	0.0
1.007	0.994	70.3	48.0	1.305	0.985	0.354	0.0
1.008	3.018	53.3	50.0	0.995	0.900	0.369	0.0

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
1.000	17.000	85.0	100	1 STANDARD	119.850	119.150	0.600	119.850	118.950	0.800
1.001	11.000	110.0	100	1 STANDARD	119.850	118.950	0.800	119.850	118.850	0.900
1.002	29.000	145.0	150	1 STANDARD	119.850	118.800	0.900	120.600	118.600	1.850
2.000	17.000	56.7	100	1 STANDARD	120.850	120.150	0.600	120.850	119.850	0.900

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	RE	150	Manhole	1 STANDARD	SW01	450	Manhole	1 STANDARD
1.001	SW01	450	Manhole	1 STANDARD	SW02	450	Manhole	1 STANDARD
1.002	SW02	450	Manhole	1 STANDARD	SW05	1200	Manhole	1 STANDARD
2.000	4	150	Manhole	1 STANDARD	SW03	450	Manhole	1 STANDARD

Pipeline Schedule

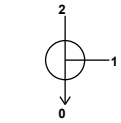
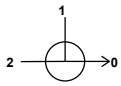
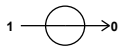
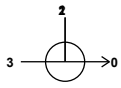
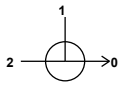
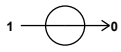
Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
2.001	13.000	32.5	100	1 STANDARD	120.850	119.850	0.900	120.850	119.450	1.300
3.000	17.000	24.3	100	1 STANDARD	120.850	120.150	0.600	120.850	119.450	1.300
2.002	9.000	60.0	100	1 STANDARD	120.850	119.450	1.300	120.600	119.300	1.200
1.003	36.000	9.6	225	1 STANDARD	120.600	118.525	1.850	116.200	114.775	1.200
1.004	12.000	32.0	225	1 STANDARD	116.200	114.775	1.200	115.850	114.400	1.225
1.005	5.000	250.0	300	1 STANDARD	115.850	114.100	1.450	115.850	114.080	1.470
4.000	9.000	150.0	225	1 STANDARD	115.800	114.500	1.075	115.850	114.440	1.185
5.000	21.000	70.0	100	1 STANDARD	115.850	114.850	0.900	115.850	114.550	1.200
1.006	21.000	247.1	300	1 STANDARD	115.850	114.080	1.470	115.600	113.995	1.305
6.000	34.000	45.0	100	1 STANDARD	115.850	114.950	0.800	115.600	114.195	1.305
1.007	57.000	247.8	300	1 STANDARD	115.600	113.995	1.305	115.050	113.765	0.985
1.008	4.000	11.3	150	1 STANDARD	115.050	113.905	0.995	114.600	113.550	0.900

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
2.001	SW03	450	Manhole	1 STANDARD	SW04	450	Manhole	1 STANDARD
3.000	6	150	Manhole	1 STANDARD	SW04	450	Manhole	1 STANDARD
2.002	SW04	450	Manhole	1 STANDARD	SW05	1200	Manhole	1 STANDARD
1.003	SW05	1200	Manhole	1 STANDARD	SW06	1200	Manhole	1 STANDARD
1.004	SW06	1200	Manhole	1 STANDARD	TANK	300	Manhole	1 STANDARD
1.005	TANK	300	Manhole	1 STANDARD	SW08	1200	Manhole	1 STANDARD
4.000	CHANNEL	300	Manhole	1 STANDARD	SW08	1200	Manhole	1 STANDARD
5.000	SW07	450	Manhole	1 STANDARD	SW08	1200	Manhole	1 STANDARD
1.006	SW08	1200	Manhole	1 STANDARD	SW09	1200	Manhole	1 STANDARD
6.000	14	450	Manhole	1 STANDARD	SW09	1200	Manhole	1 STANDARD
1.007	SW09	1200	Manhole	1 STANDARD	SW10	1500	Manhole	1 STANDARD
1.008	SW10	1500	Manhole	1 STANDARD	SEWER		Manhole	1 STANDARD

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
RE	29.986	572.740	119.850	0.700	150				
						0	1.000	119.150	100
SW01	46.758	572.169	119.850	0.900	450	1	1.000	118.950	100
									
						0	1.001	118.950	100
SW02	57.644	555.386	119.850	1.050	450	 1	1.001	118.850	100
						0	1.002	118.800	150
4	96.027	578.827	120.850	0.700	150				
						0	2.000	120.150	100
SW03	80.250	577.500	120.850	1.000	450	1	2.000	119.850	100
									
						0	2.001	119.850	100

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
6	97.250	564.500	120.850	0.700	150		0	3.000	120.150	100
SW04	80.250	564.500	120.850	1.400	450		1	3.000	119.450	100
							2	2.001	119.450	100
							0	2.002	119.450	100
SW05	80.250	555.500	120.600	2.075	1200		1	2.002	119.300	100
							2	1.002	118.600	150
							0	1.003	118.525	225
SW06	116.250	555.500	116.200	1.425	1200		1	1.003	114.775	225
							0	1.004	114.775	225
TANK	128.250	555.500	115.850	1.750	300		1	1.004	114.400	225
							0	1.005	114.100	300
CHANNEL	133.250	564.500	115.800	1.300	300		0	4.000	114.500	225
SW07	133.250	576.500	115.850	1.000	450		0	5.000	114.850	100
SW08	133.250	555.500	115.850	1.770	1200		1	5.000	114.550	100
							2	4.000	114.440	225
							3	1.005	114.080	300
							0	1.006	114.080	300
14	154.250	589.500	115.850	0.900	450		0	6.000	114.950	100
SW09	154.250	555.500	115.600	1.605	1200		1	6.000	114.195	100
							2	1.006	113.995	300
							0	1.007	113.995	300
SW10	211.250	555.500	115.050	1.285	1500		1	1.007	113.765	300
							0	1.008	113.905	150
SEWER	215.250	555.500	114.600	1.050			1	1.008	113.550	150

Simulation Settings

Rainfall Methodology	FSR	Analysis Speed	Normal
Rainfall Events	Singular	Skip Steady State	x
FSR Region	England and Wales	Drain Down Time (mins)	240
M5-60 (mm)	19.000	Additional Storage (m³/ha)	20.0
Ratio-R	0.306	Starting Level (m)	
Summer CV	0.750	Check Discharge Rate(s)	x
Winter CV	0.840	Check Discharge Volume	x

Storm Durations

15	30	60	120	180	240	360	480	600	720	960	1440

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
1	0	0	0
30	0	0	0
100	30	0	0

Node SW10 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	x	Sump Available	✓
Invert Level (m)	113.905	Product Number	CTL-SHE-0087-3500-1100-3500
Design Depth (m)	1.100	Min Outlet Diameter (m)	0.100
Design Flow (l/s)	3.5	Min Node Diameter (mm)	1200

Node TANK Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	114.100
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	248.0	225.0	0.400	248.0	249.0	0.800	248.0	273.0	0.801	0.0	273.0

Approval Settings

Node Size	✓	Maximum Full Bore Velocity (m/s)	3.000
Node Losses	✓	Proportional Velocity	✓
Link Size	✓	Return Period (years)	
Minimum Diameter (mm)	150	Minimum Proportional Velocity (m/s)	0.750
Link Length	✓	Maximum Proportional Velocity (m/s)	3.000
Maximum Length (m)	100.000	Surcharged Depth	✓
Coordinates	✓	Return Period (years)	
Accuracy (m)	1.000	Maximum Surcharged Depth (m)	0.100
Crossings	✓	Flooding	✓
Cover Depth	✓	Return Period (years)	30
Minimum Cover Depth (m)		Time to Half Empty	x
Maximum Cover Depth (m)	3.000	Discharge Rates	✓
Backdrops	✓	Discharge Volume	✓
Minimum Backdrop Height (m)		100 year 360 minute (m³)	
Maximum Backdrop Height (m)	1.500	First Flush	✓
Full Bore Velocity	✓	Return Period (years)	30
Minimum Full Bore Velocity (m/s)		First Flush Depth (mm)	5

Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)	Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
1 year 15 minute summer	95.026	26.889	30 year 360 minute summer	33.307	8.571
1 year 15 minute winter	66.685	26.889	30 year 360 minute winter	21.651	8.571
1 year 30 minute summer	64.361	18.212	30 year 480 minute summer	26.412	6.980
1 year 30 minute winter	45.166	18.212	30 year 480 minute winter	17.547	6.980
1 year 60 minute summer	45.726	12.084	30 year 600 minute summer	21.744	5.948
1 year 60 minute winter	30.379	12.084	30 year 600 minute winter	14.857	5.948
1 year 120 minute summer	29.889	7.899	30 year 720 minute summer	19.462	5.216
1 year 120 minute winter	19.857	7.899	30 year 720 minute winter	13.080	5.216
1 year 180 minute summer	23.862	6.141	30 year 960 minute summer	16.090	4.237
1 year 180 minute winter	15.511	6.141	30 year 960 minute winter	10.659	4.237
1 year 240 minute summer	19.418	5.132	30 year 1440 minute summer	11.775	3.156
1 year 240 minute winter	12.901	5.132	30 year 1440 minute winter	7.914	3.156
1 year 360 minute summer	15.316	3.941	100 year +30% CC 15 minute summer	390.195	110.412
1 year 360 minute winter	9.956	3.941	100 year +30% CC 15 minute winter	273.821	110.412
1 year 480 minute summer	12.367	3.268	100 year +30% CC 30 minute summer	268.384	75.943
1 year 480 minute winter	8.216	3.268	100 year +30% CC 30 minute winter	188.340	75.943
1 year 600 minute summer	10.335	2.827	100 year +30% CC 60 minute summer	188.962	49.937
1 year 600 minute winter	7.062	2.827	100 year +30% CC 60 minute winter	125.542	49.937
1 year 720 minute summer	9.371	2.511	100 year +30% CC 120 minute summer	119.786	31.656
1 year 720 minute winter	6.298	2.511	100 year +30% CC 120 minute winter	79.583	31.656
1 year 960 minute summer	7.916	2.085	100 year +30% CC 180 minute summer	92.594	23.828
1 year 960 minute winter	5.244	2.085	100 year +30% CC 180 minute winter	60.189	23.828
1 year 1440 minute summer	5.979	1.602	100 year +30% CC 240 minute summer	73.097	19.317
1 year 1440 minute winter	4.018	1.602	100 year +30% CC 240 minute winter	48.564	19.317
30 year 15 minute summer	232.466	65.780	100 year +30% CC 360 minute summer	55.920	14.390
30 year 15 minute winter	163.134	65.780	100 year +30% CC 360 minute winter	36.350	14.390
30 year 30 minute summer	158.200	44.765	100 year +30% CC 480 minute summer	44.101	11.655
30 year 30 minute winter	111.018	44.765	100 year +30% CC 480 minute winter	29.299	11.655
30 year 60 minute summer	110.635	29.238	100 year +30% CC 600 minute summer	36.143	9.886
30 year 60 minute winter	73.503	29.238	100 year +30% CC 600 minute winter	24.695	9.886
30 year 120 minute summer	70.113	18.529	100 year +30% CC 720 minute summer	32.224	8.636
30 year 120 minute winter	46.581	18.529	100 year +30% CC 720 minute winter	21.656	8.636
30 year 180 minute summer	54.442	14.010	100 year +30% CC 960 minute summer	26.469	6.970
30 year 180 minute winter	35.389	14.010	100 year +30% CC 960 minute winter	17.534	6.970
30 year 240 minute summer	43.230	11.424	100 year +30% CC 1440 minute summer	19.179	5.140
30 year 240 minute winter	28.721	11.424	100 year +30% CC 1440 minute winter	12.889	5.140

Results for 1 year Critical Storm Duration. Lowest mass balance: 99.66%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	RE	10	119.176	0.026	1.0	0.0065	0.0000	OK
15 minute winter	SW01	10	118.992	0.042	2.0	0.0141	0.0000	OK
15 minute winter	SW02	10	118.886	0.086	9.0	0.1026	0.0000	OK
15 minute summer	4	10	120.177	0.027	1.2	0.0075	0.0000	OK
15 minute summer	SW03	10	119.873	0.023	1.2	0.0036	0.0000	OK
15 minute summer	6	10	120.171	0.021	1.2	0.0058	0.0000	OK
15 minute winter	SW04	10	119.500	0.050	3.6	0.0144	0.0000	OK
15 minute winter	SW05	10	118.568	0.043	13.6	0.0523	0.0000	OK
15 minute winter	SW06	10	114.842	0.067	16.4	0.0970	0.0000	OK
180 minute winter	TANK	136	114.211	0.111	9.3	26.1372	0.0000	OK
15 minute summer	CHANNEL	10	114.603	0.103	15.8	0.2001	0.0000	OK
15 minute winter	SW07	10	114.886	0.035	1.9	0.0163	0.0000	OK
15 minute winter	SW08	12	114.245	0.165	22.9	0.2443	0.0000	OK
15 minute winter	14	10	114.975	0.025	1.2	0.0088	0.0000	OK
15 minute winter	SW09	12	114.243	0.248	24.6	0.4191	0.0000	OK
15 minute winter	SW10	11	114.251	0.486	21.2	0.9732	0.0000	SURCHARGED
15 minute winter	SEWER	11	113.576	0.026	3.5	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	RE	1.000	SW01	1.0	0.428	0.152	0.0404	
15 minute winter	SW01	1.001	SW02	2.0	0.654	0.346	0.0334	
15 minute winter	SW02	1.002	SW05	8.8	0.860	0.601	0.2981	
15 minute summer	4	2.000	SW03	1.2	0.789	0.149	0.0259	
15 minute summer	SW03	2.001	SW04	1.2	0.468	0.112	0.0340	
15 minute summer	6	3.000	SW04	1.2	0.506	0.097	0.0434	
15 minute winter	SW04	2.002	SW05	3.6	0.945	0.456	0.0340	
15 minute winter	SW05	1.003	SW06	13.6	1.800	0.080	0.2744	
15 minute winter	SW06	1.004	TANK	16.1	1.684	0.174	0.1146	
180 minute winter	TANK	1.005	SW08	-4.6	0.431	-0.066	0.1328	
15 minute summer	CHANNEL	4.000	SW08	15.8	0.946	0.373	0.1504	
15 minute winter	SW07	5.000	SW08	1.9	0.770	0.262	0.0517	
15 minute winter	SW08	1.006	SW09	16.5	0.731	0.234	1.0699	
15 minute winter	14	6.000	SW09	1.2	0.793	0.130	0.0818	
15 minute winter	SW09	1.007	SW10	19.3	0.536	0.275	3.7798	
15 minute winter	SW10	1.008	SEWER	3.5	1.637	0.066	0.0086	16.9

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.43%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	RE	10	119.193	0.043	2.5	0.0105	0.0000	OK
15 minute winter	SW01	11	119.171	0.221	5.0	0.0745	0.0000	SURCHARGED
15 minute winter	SW02	11	119.096	0.296	21.0	0.3513	0.0000	SURCHARGED
15 minute winter	4	10	120.193	0.043	2.8	0.0118	0.0000	OK
15 minute summer	SW03	10	119.885	0.035	2.8	0.0056	0.0000	OK
15 minute summer	6	10	120.183	0.032	2.8	0.0089	0.0000	OK
15 minute winter	SW04	10	119.568	0.118	8.4	0.0341	0.0000	SURCHARGED
15 minute winter	SW05	11	118.589	0.064	30.1	0.0780	0.0000	OK
15 minute winter	SW06	11	114.883	0.108	36.8	0.1551	0.0000	OK
240 minute winter	TANK	232	114.483	0.382	20.3	90.1609	0.0000	SURCHARGED
15 minute summer	CHANNEL	10	114.692	0.192	38.6	0.3731	0.0000	OK
15 minute winter	SW07	10	114.910	0.060	4.7	0.0277	0.0000	OK
240 minute winter	SW08	232	114.483	0.402	11.9	0.5961	0.0000	SURCHARGED
15 minute winter	14	10	114.988	0.038	2.8	0.0137	0.0000	OK
240 minute winter	SW09	232	114.482	0.487	5.1	0.8245	0.0000	SURCHARGED
240 minute winter	SW10	232	114.482	0.717	4.1	1.4341	0.0000	SURCHARGED
15 minute summer	SEWER	13	113.576	0.026	3.5	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	RE	1.000	SW01	2.5	0.524	0.381	0.0937	
15 minute winter	SW01	1.001	SW02	4.8	0.673	0.841	0.0861	
15 minute winter	SW02	1.002	SW05	19.7	1.127	1.342	0.4881	
15 minute winter	4	2.000	SW03	2.8	0.994	0.348	0.0479	
15 minute summer	SW03	2.001	SW04	2.8	0.529	0.263	0.0668	
15 minute summer	6	3.000	SW04	2.8	0.600	0.227	0.0852	
15 minute winter	SW04	2.002	SW05	7.9	1.088	1.013	0.0683	
15 minute winter	SW05	1.003	SW06	30.2	2.168	0.179	0.5050	
15 minute winter	SW06	1.004	TANK	36.5	2.068	0.396	0.2118	
240 minute winter	TANK	1.005	SW08	-11.5	-0.371	-0.165	0.3521	
15 minute summer	CHANNEL	4.000	SW08	38.6	1.145	0.912	0.3023	
15 minute winter	SW07	5.000	SW08	4.7	0.966	0.649	0.1020	
240 minute winter	SW08	1.006	SW09	3.8	0.423	0.054	1.4788	
15 minute winter	14	6.000	SW09	2.8	0.838	0.309	0.1798	
240 minute winter	SW09	1.007	SW10	3.7	0.306	0.053	4.0139	
240 minute winter	SW10	1.008	SEWER	3.5	1.637	0.066	0.0086	91.1

Results for 100 year +30% CC Critical Storm Duration. Lowest mass balance: 99.22%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	RE	12	119.766	0.615	4.3	0.1514	0.0000	FLOOD RISK
15 minute winter	SW01	11	119.709	0.758	6.5	0.2556	0.0000	FLOOD RISK
15 minute winter	SW02	11	119.622	0.822	31.3	0.9761	0.0000	FLOOD RISK
15 minute winter	4	9	120.209	0.059	4.8	0.0161	0.0000	OK
15 minute winter	SW03	11	119.960	0.110	4.8	0.0175	0.0000	SURCHARGED
15 minute summer	6	10	120.193	0.043	4.8	0.0119	0.0000	OK
15 minute winter	SW04	11	119.882	0.432	13.8	0.1244	0.0000	SURCHARGED
15 minute winter	SW05	11	118.605	0.080	46.4	0.0977	0.0000	OK
15 minute winter	SW06	11	114.920	0.145	57.3	0.2084	0.0000	OK
600 minute winter	TANK	570	114.918	0.818	17.6	188.6926	0.0000	SURCHARGED
600 minute winter	CHANNEL	570	114.918	0.418	7.0	0.8136	0.0000	SURCHARGED
15 minute winter	SW07	10	114.971	0.121	8.0	0.0555	0.0000	SURCHARGED
600 minute winter	SW08	570	114.918	0.838	10.2	1.2405	0.0000	SURCHARGED
15 minute winter	14	10	115.002	0.052	4.8	0.0186	0.0000	OK
600 minute winter	SW09	570	114.917	0.922	3.6	1.5608	0.0000	SURCHARGED
600 minute winter	SW10	570	114.917	1.152	3.7	2.3048	0.0000	FLOOD RISK
15 minute summer	SEWER	137	113.576	0.026	3.5	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	RE	1.000	SW01	4.3	0.546	0.652	0.1330	
15 minute winter	SW01	1.001	SW02	8.6	1.094	1.488	0.0861	
15 minute winter	SW02	1.002	SW05	29.4	1.670	1.999	0.5054	
15 minute winter	4	2.000	SW03	4.8	1.121	0.600	0.1008	
15 minute winter	SW03	2.001	SW04	4.8	0.662	0.454	0.1017	
15 minute summer	6	3.000	SW04	4.8	0.745	0.389	0.0942	
15 minute winter	SW04	2.002	SW05	12.8	1.641	1.642	0.0697	
15 minute winter	SW05	1.003	SW06	46.4	2.347	0.275	0.7138	
15 minute winter	SW06	1.004	TANK	56.9	2.273	0.617	0.3004	
600 minute winter	TANK	1.005	SW08	-10.0	0.243	-0.143	0.3521	
600 minute winter	CHANNEL	4.000	SW08	7.0	0.765	0.166	0.3579	
15 minute winter	SW07	5.000	SW08	7.6	1.026	1.044	0.1584	
600 minute winter	SW08	1.006	SW09	3.2	0.409	0.046	1.4788	
15 minute winter	14	6.000	SW09	4.8	0.871	0.531	0.2027	
600 minute winter	SW09	1.007	SW10	3.3	0.141	0.047	4.0139	
600 minute winter	SW10	1.008	SEWER	3.5	1.637	0.066	0.0086	151.6